Approved For Release 2004/08/19 ; CIA-RDR814/0980R000100020062-1

WASHINGTON, D. C. 20505

Office of Legislative Counsel

Ptg file in Duigo

1 2 APR 1978 OLC 78-1329

Ms. Deanne C. Siemer General Counsel Department of Defense Pentagon

Dear Ms. Siemer:

Per your request of last week, enclosed are copies of our documents which had been included in the package your office sent to the Kennedy Subcommittee for the MKULTRA hearings. We have sanitized the documents so that they may be released as you had requested.

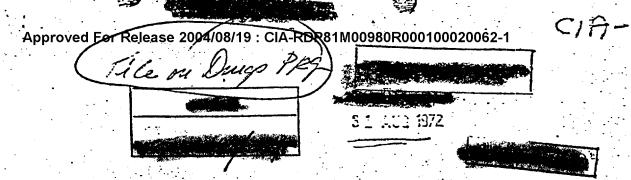
Sincerely,

Acting Legislative Counsel

STAT

Enclosure

Distribution: Orig - Addressee 1 - OLC Subject w/encl 1 - DDS&T w/encl 1 - OLC Chron w/o/encl OLC:RSG:jms (12 Apr 78)



MEMORANDUM FOR: Deputy Director for

SUBJECT

Transfer of Funds to ONR for Follow-on Task at

the

1. This memorandum contains a recommendation for your approval. The recommendation is contained in paragraph 7.

2: The research program described in the appended proposal is part of the Materials Analysis Project. The overall objective of these studies is to synthesize new classes of pharmacologically active drugs affecting the central nervous system so as to evaluate their modification of man's behavior.

task will be a continuation of the above work.

large, multidisciplinary programs which were supported by government and industry in the United States and abroad. These programs involved studies on psychomimetics and narcotics and with central nervous system active agents in general.

t. The proposed work will cover a period of one year and will cost approximately.

Over a period of two years several potential contractors have been contacted and evaluated with reference to this task.

was chosen because it was the only candidate which offered the necessary range of professional disciplines and experience in organic synthesis involving

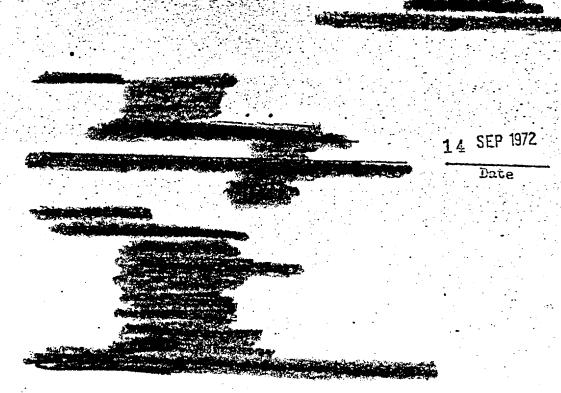


Approved For Release 2004/08/19 : CIA-RDP81M00980R

Approved For Release 2004/08/19: CIA-RDP81M00980R000100020062-1
SUBJECT: Transfer of Funds to Old for Follow-on Task at the

the class of materials nominated for exploration. Coordination has been effected with proposed research.

- 5. A follow-on action can be enticipated possibly at an increased level depending on performance and anticipated new developments in this area.
- officer with responsibility for monitoring the execution of the task. This project is funded through the Office of Mevel Research. This arrangement protects the Agency's association with this area of research and provides the contractor with credible sponsorship. The work will be UNCLASSIFIED, but Agency association will be CONFIDERITAL.
- of the trensfer of the to the Office of Raval Research for support of this task by the control of the control o



Approved for Resease 20048848 CIA-RD 8440001000200624 December 1977 Description & Program Wide/Behavioral Activity Materials Analysis Occasioriton New analogs of compounds that show evidence of unique biological activity will be synthesized and tested in the screening facility. Both parent compounds analog series will be selected on the strictest evidence of existing and predictive effects. Background The current screening program has been successful in identifying the big logical activities of several classes of compounds. A necessary sequal to this in its synthesis of analogs which will be more specific in action as well as the intelliable. This effort will also supply additional compounds to the screen which its light in the control of the screen which its light is received. Control of the Supplement Systems Coordination: Prop. IN Mano	TRN NO.		-	
will be synthesized and tested in the screening facility. Both parent compound a analog series will be selected on the strictest evidence of existing and predictive effects. accessouse. The current acreening program has been successful in idealitying the big logical activities of several classes of compounds. A necessary sequal to this in the synthesis of analogs which will be more specific in action as well as more careful to the series as well as more careful to the series as well as more careful to the series. Contractor: Type of Work: Research Technical Field: Life Support Systems Coordination: Proc. In Manufulation,	SVETT Action	THENT		CIA-RDP81M00980R000100020062-1
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Organic Materials Synthesis				

Approved For Release 2004/08/19 : CIA-RDP81M00980R000100020062-1

8 March 1972

MEMORANDUM FOR: Director of

SUBJECT:

Transfer of Funds to ONR for Add-On Task at the

l. The research program described in the appended proposal is part of the Materials Analysis Project. The overall objective of these studies is to synthesize and evaluate new classes of pharmacologically active central nervous system drugs. The two principal areas of the current effort are:

This add-on task will be a continuation of the above work

This add-on task will be a continuation of the above work and also the first beginning work in developing new narcotic blocking agents.

- has been responsible for the development of large, multidisciplinary programs which were supported by government and industry in the United States and abroad. These programs involved studies on psychomimetics and narcotics and with central nervous system active agents in general.
- 3. The proposed work will cover a period of approximately 95 days and will cost approximately. Over a period of two years several potential contractors have been contacted and evaluated with reference to this task.

 was chosen because it was the only candidate which offered the necessary range of professional disciplines and experience in organic synthesis involving the class of materials nominated for exploration. Coordination has been affected with

- 4. A follow-on action can be anticipated in early FY 73, possibly at an increased level depending on performance and anticipated new developments in this area.
- 5. Dr. is the project officer with responsibility for monitoring the execution of the task. This project is funded through the Office of Naval Research. This arrangement protects the Agency's association with this area of research and provides the contractor with credible sponsorship. The work will be UNCLASSIFIED, but Agency association will be CONFIDENTIAL.
- approval of the transfer of th

Approved For Release 2004/08/19 : CIA-RDP81M00980R00016000200024

CIA

PROPOSAL

16 December 1955

Approved For Release 2004/08/19 : CIA-RDP81M00980R000100020062-1

Approved For Release 2004/08/19 + CIA-RDP81M00980R000100020062-1



SUBJECT: Request for Support of Research on the

- 1. This is a request for financial support for research on the mechanism of brain concussion for the period 1 Feb 1956 to 1 Feb 1957.
- 2. The resonance-cavitation theory upon which this research is to be based : has been presented in the proposal submitted to the Chief of Naval Research dated 27 March 1954.
- 3. The program as originally submitted estimated the duration of the program to be from three to five years requesting a total of \$72,109 for the initial year.
- 4. At the request of the Office of Naval Research a reduced budget was submitted.
- 5. amounting to \$24,925, was then awarded to the to 1 Feb 1955 to 1 Feb 1956.
- ó. The progress made to date under the above contract can be summarized as follows:

A, RESEARCH FACILITIES

The following research facilities have been established for the investigation of the very diverse aspects of the problems being studied:

9343/265/26

- a. Main Laboratory
 Atotal of 2500 square feet of laboratory and office space
 equipped with much of the diversified machinery and apparatus
 necessary for research in this field.
- A blast range has been established a located .

 approximately south of This area is owned by the U. S. Army and is closed to the public.

 Three blast test-series have been run to date.
- Arrangments have been made with the for use of the A test area has been assigned for this

Approved For Release 2004/08/19: CIA-RDP81M00980R000100020062-1

specific work. Impact tests have been conducted on the direction of

B. PERSONNEL

Both full-time technical personnel and part-time professional research personnel have been acquired and indoctrinated relative to their specific function.

C. TECHNICAL PROGRESS

Following is the technical progress made under the current Navy contract:

- a. Specialized instrumentation and numerous testing techniques
 have been developed to obtain the desired dynamic data.
- b. Considerable data has now been obtained supporting the resonance-cavitation theory of brain concussion.
- c. Preliminary acceleration threshold data has been obtained for a fluid-filled glass simulated skull.
- d. Data has been obtained on the nature and the magnitude of pressure fluctuations within a glass simulated skull subject to either impact or sound waves propagated in air.
- e. Initial studies have been made on the simulated glass skull attempting to establish the cavitation patterns for various types of impact.
- '. The proposed method and program plan remain the same as stated in the original proposal, except for the temporary deletion of the immersion blast study.
- In the current level of activity on this project can be indicated by the most recent billing to the Navy for the month of November, which amounted to \$4,034.61.
- 7. In the interest of efficiency and economy it is requested that at least this level of activity be maintained for the coming year.

Approved For Release 2004/08/19: CIA-RDP81M00980R000100020062-1 10.0 POTENTIAL APPLICATIONS OF THE RESEARCH FINDINGS

- defines brain concussion as: "an essentially transient state due to head injury which is of instantanious onset, manifests widespread symptoms of purely paralytic kind, does not as such comprise any evidence of structural cerebral injury, and is always followed by amnesia for the actual moment of the accident."
- 10.2 The implication of the underlined portion of the above statement is that if a technique were devised to induce brain concussion without giving either advance warning or causing external physical trauma, the person upon recovery would be unable to recall what had happened to him. Under these conditions the same technique of producing the concussion could be re-used many times without disclosure of its nature.
- 10.3 First, considering the possibilities of direct impact to the head or body, it should be possible from the findings of this research program to determine the following:
 - . a. Optimum design of impacting devices.
 - b. Optimum points of impact on skull or body for the specific effects desired.
 - c. Intensity of the blow for the effect desired.
- 10,4 In regard to the potential impacting devices, there are certain design requsites that are apparent at this time:
 - a. The impact should be delivered without advance warning.
 - b. The area of impact and force distribution should be such that surface trauma does not occur.
 - c. The intensity of the impacting force and its duration should be such as to obtain the desired effect.
 - d. The device should be as small and as silent as possible.
- 10.5 The specific impacting devices might take the form of any of the following:
 - a. A pancake type black-jack giving a high peak impact force with a low unit surface pressure.
 - b. Concealed or camouflaged spring-loaded impacting devices that trigger upon contact with the head.

Approved FUPREE 12004708/197264-RDP8/M00980R000100020062-1

- d. An explosive pad detonated in contact with the head or the body.
- 10.6 Let us now consider the possibilities of exciting the resonance cavitation directly without impact. There is considerable evidence that resonance cavitation can be induced directly in the following ways:
 - a. A blast wave propagated in air. (Blast Concussion)
 - b. Physical excitation with a mechanical driver or horn, tuned to the resonant frequency of the head.
- 10.7 A single blast pressure wave propagated in air must have considerable intensity in order to produce brain concussion, however, there is considerable evidence (Carver & Dinsley) that modification of the pressure wave can produce profound effects.
- 10.8 Excitation of the resonance cavitation by using a tuned driver at this time appears to be well within the relm of possibility. The neurotic-like manifestations normally associated with blast concussion could possibly be induced by this method. Use of this method, however, would require actual physical contact with the drivers.
- 10.9 Excitation of the resonance cavitation by tuned sound waves also appears to be a reasonable possibility. Concentration of the sound-field at some remote point could be effected with accoustical lenses and reflectors. The blast duration would be in the order of a tenth of a second. Masking of a noise of this duration should not be too dificult.
- 11.0 It would possibly be advantageous to establish the effectivness of both of the above methods as a tool in brain-wash therapy.

 A full knowledge of the method and the resulting sequela should be of aid to any person forced to submit to such treatment.
- 12.0 Possibly the most significant potential aspect of this study would be in the development of practical means of giving a person immunity, even though temporary, to brain concussion. One technique that appears to have potentialities involves the introduction of a small quantity of gas, approximately 1 cc, into the spinal cord. This gas bubble would then normally migrate to the ventricles located at the centrum of the brain. The ability of this bubble to expand under dynamic loading would be most effective in preventing resonance cavitation from occuring.

PROPOSED BUDGET

Approved For Release 2004/08/19: CIA-RDP81M00980R000100020062-1
--- (1 Feb 1956 to 1 Feb 1957)

Direct Labor	\$23,594
Materials	4,000
Overhead (83.21% of \$23,594)*	. 19,633
Travel	. 800
Consultant Fees	1,000
Laboratory Equipment**	10,000
Contingencies	973
. Total	\$60,000

[⇒] See attached letter for breakdown.

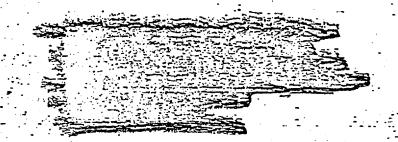
- ** In regard to the laboratory equipment the following stipulations are proposed:
 - a. The laboratory equipment will be purchased by the contractor at the start of the years program, however, the sponsor will remain legal owner of the equipment.
 - b. The book value of the above equipment will then be depreciated over a five year period by the sum of the digits method. The schedule of depreciation will then be as follows:

- c. If at any time the sponsor withdraws financial support, the contractor is then to be granted 1 year rent_free use of the equipment.
- d. At the end of this grace period the contractor has then the option of purchase from the sponsor of any or all items of equipment at the then depreciated value.
- e. At the end of the five years of life the individual items of equipment have no book value and automatically become the property of the contractor.

Approved For Release 2004/08/19: CIA-RDP81M00980R000100020062-1 FROPOSED SCHEDULE OF PAYMENT

1	Feb	1956	\$22,500

Total \$60;888



Approved For Release 2004/08/19 : CIA-RDP81M00980R000100020062-1

SELUCT:

The Conversion of Project Halletof from One Cover to Million

- In the first year's work on this program was financed through the lawy for soveral reasons: First, the work program at that time chiefly involved theoretical studies and the development of tools and models which presented no security hazard and involved no security fraction. Second, which was not cleared, had to be dealt with through a cut-out, and could not be informed at our true interest. Finally, previous key contracts an protective gamende it entirely logical to proceed for a time under an unclassified Old contract as cover.
- In this research, the whole scope of the project charged and it become apparent that developmentalight be expected in the second year which would make it impossible to operate the program securely under the previous cover. Specifically, huma experiments of a type not easily justifiable on midcal-therapeutic grounds would be involved. In addition, cartain items of equipment are likely to be developed which according to Dr. Quinty of CMI could not be covertly hamiltain nader the present CMI setup. It was Dr. Quinty's general opinion that unless we were willing to clear a considerable number of people in the log Angeles Branch of CMI and to accept a lover order of security treatment of the project than we feel in necessary CMI sould not be able to bendle the project satisfactorily.
- 3. For the reasons given above and because this project in a general may will begin to become involved in the subjects of interrogation and some expects of brain-washing, TES/CD has decided that it should be funded through project MANIFA rather than by less secure methods.

TSS/Chemical Division

Distribution:

(10 January 1956)

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Approved For Release 2004/08/19 : CIA-RDP81M00980R000100020062-1

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Approved For Release 2004/08/19: CIA-RDP81M00980R000100020062-1

Background material for file

Approved For Release 2004/08/19: CIA-RDP81M00980R000100020062-1

- 1. August 31, 1972, memorandum for Deputy Director of Science and Technology.
- 2. December 29, 1970, CIA Card File on Organic Material Synthesis.
- 3. March 8, 1972, memorandum to the Director of Research and Development.
- 4. December 16, 1955, request for support of research.
- 5. January 10, 1956, memorandum for the record, subject, Conversion of Project MKDECOY from ONR cover to MKULTRA.

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Approved For Release 2004/08/19 : CIA-RDP81M00980R000100020062-1

CIA

PROPOSAL

16 December 1955

Approved For Release 2004/08/19: CIA-RDP81M00980R000100020062-1

SUBJECT: Request for Support of Research on the

- 1. This is a request for firancial support for research on the mechanism of brain concussion for the period 1 Feb 1956 to 1 Feb 1957.
- 2. The resonance-cavitation theory upon which this research is to be based : has been presented in the proposal submitted to the Chief of Naval Research dated 27 March 1954.
- 3. The program as originally submitted estimated the duration of the program to be from three to five years requesting a total of \$72,109 for the initial year.
- 4. At the request of the Office of Naval Research a reduced budget was submitted.
- 5. amounting to \$24,925, was then awarded to the to 1 Feb 1955
- 6. The progress made to date under the above contract can be summarized as follows:

A. RESEARCH FACILITIES

The following research facilities have been established for the investigation of the very diverse aspects of the problems being studied:

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- a. Main Laboratory
 Atotal of 2500 square feet of laboratory and office space
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- A blast range has been established a located approximately south of area is owned by the U. S. Army and is closed to the public. Three blast test-series have been run to date.
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Approved For Release 2004/08/19 : CIA-RDP81M00980R000100020062-1

-specific work. Impact tests have been conducted on direction of direction of

B. PERSONNELL

Both full_time technical personnel and part_time professional research personnel have been acquired and indoctrinated relative to their specific function.

C. TECHNICAL PROGRESS

Following is the technical progress made under the current Navy contract:

- a. Specialized instrumentation and numerous testing techniques . . have been developed to obtain the desired dynamic data.
- b. Considerable data has now been obtained supporting the resonance-cavitation theory of brain concussion.
- c. Preliminary acceleration threshold data has been obtained for a finid-filled glass simulated skull.
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- e. Initial studies have been made on the simulated glass skull attempting to establish the cavitation patterns for various types of impact.
- 7. The proposed method and program plan remain the same as stated in the original proposal, except for the temporary deletion of the immersion blast study.
- The current level of activity on this project can be indicated by the most recent billing to the Navy for the month of November, which amounted to \$4,034.61.
-). In the interest of efficiency and economy it is requested that at least this level of activity be maintained for the coming year.

- 10.0 POTENTApproved for release 2004/08/49 = CIA_RDP81-MP0980R000100020062-1
- defines brain concussion as: "an essentially transient state due to head injury which is of instantanious onset, manifests widespread symptoms of purely paralytic kind, does not as such comprise any evidence of structural cerebral injury, and is always followed by ammesia for the actual moment of the accident."
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- 10.3 First, considering the possibilities of direct impact to the head or body, it should be possible from the findings of this research program to determine the following:

- 2. Optimum design of impacting devices.

- b. Optimum points of impact on skull or body for the specific effects desired.
- C. Intensity of the blow for the effect desired.
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 - e. The intensity of the impacting force and its duration should be such as to obtain the desired effect.
 - d. The device should be as small and as silent as possible.
- 10.5 The specific impacting devices might take the form of any of the following:
 - a. A pancake type black-jack giving a high peak impact force with a low unit surface pressure.
 - b. Concealed or camouflaged spring-loaded impacting devices that trigger upon contact with the head.

INTELLIGENCE

Approved For Release 2004/08/19: GLARDP81M00989R999190020062-1

- d. An explosive pad detonated in contact with the head or the body.
- 10.6 Let us now consider the possibilities of exciting the resonance cavitation directly without impact. There is considerable evidence that resonance cavitation can be induced directly in the following ways:
 - a. A blast wave propagated in air. (Blast Concussion)
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- 10.7 A single blast pressure wave propagated in air must have considerable intensity in order to produce brain concussion, however, there is considerable evidence (Carver & Dinsley) that modification of the pressure wave can produce profound effects.
- 10.8 Excitation of the resonance cavitation by using a tuned driver at this time appears to be well within the relm of possibility. The neurotic-like manifestations normally associated with blast concussion could possibly be induced by this method. Use of this method, however, would require actual physical contact with the drivers.
- 10.9 Excitation of the resonance cavitation by tuned sound waves also appears to be a reasonable possibility. Concentration of the soundfield at some remote point could be effected with accountical lenses and reflectors. The blast duration would be in the order of a tenth of a second. Masking of a noise of this duration should not be too difficult.
- 11.0 It would possibly be advantageous to establish the effectivness of both of the above methods as a tool in brain-wash therapy.
 A full knowledge of the method and the resulting sequela should be of aid to any person forced to submit to such treatment.
- 12.0 Possibly the most significant potential aspect of this study would be in the development of practical means of giving a person immunity, even though temporary, to brain concussion. One technique that appears to have potentialities involves the introduction of a small quantity of gas, approximately 1 cc, into the spinal cord. This gas bubble would then normally migrate to the ventricles located at the centrum of the brain. The ability of this bubble to expand under dynamic loading would be most effective in preventing resonance cavitation from occuring.

--- (1 Feb. 1956 to 1 Feb 1957)
Approved For Release 2004/08/19 : CIA-RDP81M00980R000100020062-

Approved For Releas	e 2004/06	ris: CIA	7-KD50,118100
Direct Labor	is .	•	\$23,594
Materials		•	4,000
Overhead (83.21% of	\$23,594) *	19,633
Travel		-	- 800
Consultant Fees			1,000
Laboratory Equipment	° P≯÷		10,000
Contingencies		* .	973
23000	Total		\$60,000

[⇒] See attached letter for breakdown.

** In regard to the laboratory equipment the following stipulations are proposed:

- a. The laboratory equipment will be purchased by the contractor at the start of the years program, however, the sponsor will remain legal owner of the equipment.
- b. The book value of the above equipment will then be depreciated over a five year period by the sum of the digits method. The schedule of depreciation will then be as follows:

- c. If at any time the sponsor withdraws financial support, the contractor is then to be granted 1 year rent-free use of the equipment.
- d. At the end of this grace period the contractor has then the option of purchase from the sponsor of any or all items of equipment at the then depreciated value.
- e. At the end of the five years of life the individual items of equipment have no book value and automatically become the property of the contractor.

Approved For Release 2004/08/19: CIA_RDP81M00980R000100020062-1 FROPOSED SCHEDULE OF PAYHENT

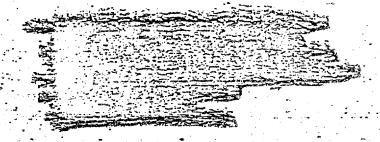
1 Feb 1956 \$22,500

1 May 1956 12,500

1 Aug 1956 12,586

1 Nov 1956 12,500

Total \$60;000



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Approved For Release 2004/08/19 : CIA-RDP81M00980R000108020062-1

Durin

Market -

PROPOSAL

16 December 1955

Approved For Release 2004/08/19: CIA-RDP81M00980R000100020062-1

SUBJECT: Request for Support of Research on the

- 1. This is a request for financial support for research on the mechanism of brain concussion for the period 1 Feb 1956 to 1 Feb 1957.
- 2. The resonance-cavitation theory upon which this research is to be based : has been presented in the proposal submitted to the Chief of Naval Research dated 27 March 1954.
- 3. The program as originally submitted estimated the duration of the program to be from three to five years requesting a total of \$72,109 for the initial year.
- 4. At the request of the Office of Naval Research a reduced budget was submitted.
- 5. amounting to \$24,925, was then awarded to the composite the program from 1 Feb 1955 to 1 Feb 1956.
- 6. The progress made to date under the above contract can be summarized as follows:

A. RESEARCH FACILITIES

The following research facilities have been established for the investigation of the very diverse aspects of the problems being studied:

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- a. Main Laboratory
 Atotal of 2500 square feet of laboratory and office space
 equipped with much of the diversified machinery and apparatus
 necessary for research in this field.
- A blast range has been established about located approximately south of the U.S. Army and is closed to the public. Three blast test-series have been run to date.
 - Arrangments have been made with the the for use of A test area has been assigned for this

Approved For Release 2004/08/19 : CIA-RDP81M00980R000100020062-1

specific work. Impact tests have been conducted on the direction of

B. PERSONNEL

Both full-time technical personnel and part-time professional research personnel have been acquired and indoctrinated relative to their specific function.

C. TECHNICAL PROGRESS

Following is the technical progress made under the current Navy contract:

- a. Specialized instrumentation and numerous testing techniques
 -- have been developed to obtain the desired dynamic data.
- b. Considerable data has now been obtained supporting the resonance-cavitation theory of brain concussion.
- c. Preliminary acceleration threshold data has been obtained for a fluid-filled glass simulated skull.
- d. Pata has been obtained on the nature and the magnitude of pressure fluctuations within a glass simulated skull subject to either impact or sound waves propagated in air.
- e. Initial studies have been made on the simulated glass skull attempting to establish the cavitation patterns for various types of impact.
- 7. The proposed method and program plan remain the same as stated in the original proposal, except for the temporary deletion of the immersion blast study.
- 3. The current level of activity on this project can be indicated by the most recent billing to the Navy for the month of November, which amounted to \$4.034.61.
- 7. In the interest of efficiency and economy it is requested that at least this level of activity be maintained for the coming year.

- 10.0 POTENTAPPROVED FOR Release 2004/08/1945 [A-RDP81M00980R000100020062-1
- defines brain concussion as: "an essentially transient state due to head injury which is of instantanious onset, manifests widespread symptoms of purely paralytic kind, does not as such comprise any evidence of structural cerebral injury, and is always followed by ammesia for the actual moment of the accident."
- 10,2 The implication of the underlined portion of the above statement is that if a technique were devised to induce brain concussion without giving either advance warning or causing external physical trauma, the person upon recovery would be unable to recall what had happened to him. Under these conditions the same technique of producing the concussion could be re-used many times without disclosure of its nature.
- 10.3 First, considering the possibilities of direct impact to the head or body, it should be possible from the findings of this research program to determine the following:

- . a. Optimum design of impacting devices.

- b. Optimum points of impact on skull or body for the specific effects desired.
- c. Intensity of the blow for the effect desired.
- 10.4 In regard to the potential impacting devices, there are certain design requsites that are apparent at this time:
 - a. The impact should be delivered without advance warning.
 - b. The area of impact and force distribution should be such that surface trauma does not occur.
 - c. The intensity of the impacting force and its duration should be such as to obtain the desired effect.
 - d. The device should be as small and as silent as possible.
- 10.5 The specific impacting devices might take the form of any of the following:
 - a. A pancake type black-jack giving a high peak impact force with a low unit surface pressure.
 - b. Concealed or camouflaged spring-loaded impacting devices that trigger upon contact with the head.

INTELLIGENCE

-c. A projectile type impacter such as an air gun Approved For Release 2004/08/19 CIA-RDE81M90980R000100020062-1

- d. An explosive pad detonated in contact with the head or the body.
- 10.6 Let us now consider the possibilities of exciting the resonance cavitation directly without impact. There is considerable evidence that resonance cavitation can be induced directly in the following ways:
 - a. A blast wave propagated in air. (Blast Concussion)
 - b. Physical excitation with a mechanical driver or horn, tuned to the resonant frequency of the head.
- 10.7 A single blast pressure wave propagated in air must have considerable intensity in order to produce brain concussion, however, there is considerable evidence (Carver & Dinsley) that modification of the pressure wave can produce profound effects.
- 10.8 Excitation of the resonance cavitation by using a tuned driver at this time appears to be well within the relm of possibility. The neurotic-like manifestations normally associated with blast concussion could possibly be induced by this method. Use of this method, however, would require actual physical contact with the drivers.
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-- (1 Feb. 1956 to 1 Feb. 1957) Approved For Release 2004/08/19: CIA-RDP81M00980R000100020062-1

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Direct Labor		\$23,594
Materials	•	4,000
Overhead (83.21% of \$23	3,594)*	19,633
Travel	-	800
Consultant Fees		1,000
Laboratory Equipment**		10,000
Contingencies	•	973
Tot	al.	\$60,000

[⇒] See attached letter for breakdown.

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- c. If at any time the spensor withdraws financial support, the contractor is then to be granted 1 year rent-free use of the equipment.
- d. At the end of this grace period the contractor has then the option of purchase from the sponsor of any or all items of equipment at the then depreciated value.
- e. At the end of the five years of life the individual items of equipment have no book value and automatically become the property of the contractor.

Approved For Release 2004/08/19: CIA-RDP81M00980R000100020062-1

1 Feb 1956 \$22,500

1 May 1956 12,500

1 Aug 1956 12;586

1 Nov 1956 12,500

Total \$60;888



Approved For Release 2004/08/19: CIA-RDP81M00980R000100020062-1 77-0666/304 OLC #77-21

MEMORANDUM FOR: Deputy Director for

SUBJECT

Transfer of Funds to ONR for Follow-on Task at

This memorandum contains a recommendation for your approval. The recommendation is contained in paragraph 7.

2: The research program described in the appended proposal is part of the Materials Analysis Project. The overall objective of these studies is to synthesize new classes of pharmacologically active drugs affecting the central nervous system so as to evaluate their modification of man's behavior.

task will be a continuation of the above work.

has been responsible for the development of large, multidisciplinary programs which were supported by government and industry in the United States and abroad. These programs involved studies on psychomimetics and narcotics and with central nervous system active agents in general.

4. The proposed work will cover a period of one year and will cost approximately Over a period of two years several potential contractors have been contacted and evaluated with reference to this task. was chosen because it was the only candidate which offered the necessary range of professional disciplines and experience in organic synthesis involving



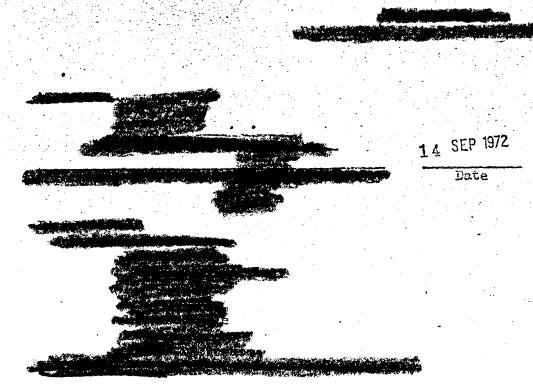
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.SUBJECT: Transfer of Funds to Old for Follow-on Task at the

the class of materials nominated for exploration. Coordination has been effected with the proposed research.

- 5. A follow-on action can be enticipated possibly at an increased level depending on performance and anticipated new developments in this area.
- officer with responsibility for monitoring the execution of the task. This project is funded through the Office of Mayal Research. This arrangement protects the Agency's association with this area of research and provides the contractor with credible sponsorship. The work will be UNCIASSIFIED, but Agency association will be CONFIDENTIAL.
- 7. The recommends approval of the transfer of the to the Office of Eavel Research for support of this task by the



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8 March 1972

MEMORANDUM FOR: Director of

SUBJECT:

Transfer of Funds to ONR for Add-On Task at the

1. The research program described in the appended proposal is part of the Materials Analysis Project. The overall objective of these studies is to synthesize and evaluate new classes of pharmacologically active central nervous system drugs. The two principal areas of the current effort are:

This add-on task will be a continuation of the above work and also the first beginning work in developing new narcotic blocking agents.

has been responsible for the development of large, multidisciplinary programs which were supported by government and industry in the United States and abroad. These programs involved studies on psychomimetics and narcotics and with central nervous system active agents in general.

3. The proposed work will cover a period of approximately 95 days and will cost approximately. Over a period of two years several potential contractors have been contacted and evaluated with reference to this task. Was chosen because it was the only candidate which offered the necessary range of professional disciplines and experience in organic synthesis involving the class of materials nominated for exploration. Coordination has been affected with

- 4. A follow-on action can be anticipated in early FY 73, possibly at an increased level depending on performance and anticipated new developments in this area.
- officer with responsibility for monitoring the execution of the task. This project is funded through the Office of Naval Research. This arrangement protects the Agency's association with this area of research and provides the contractor with credible sponsorship. The work will be UNCLASSIFIED, but Agency association will be CONFIDENTIAL.
- 6. The recommends approval of the transfer of to the Office of Naval Research for support of this task by the

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Approved For Release 2004/09/19 : CIA-RDP81M00980R000100920062-1

SUBJECT:

The Conversion of Project IEDECT from ONE Cover to MKULTEA

- I. The first year's work on this progrem was financed through the Many for soveral reasons: First, the work progrem at that time chiefly involved theoretical studies and the development of tools and models which presented no sociality hazard and involved no specific product other than unclassified information. Second, was not cleared, had to be dealt with through a cut-out, and could not be informed of our true interest. Finally, previous Many contracts on protective goer made it entirely logical to proceed for a time under an unclassified OM centract as cover.
- in this research, the whole scope of the project charged and it become apparent that developmentalight be expected in the second year which would make it impossible to operate the program securely under the previous cover. Specifically, human experiments of a type not easily justifiable on exhical therapeutic grounds would be involved. In addition, cortain item of equipment are likely to be developed which according to Dr. Quimby of CAR could not be covertly hamilaid under the present CAR setup. It was Dr. Quimby's general opinion that unless we were willing to clear a considerable number of people in the Los Angeles Branch of CAR and to accept a lower order of security treatment of the project than we feel in necessary CAR would not be able to hamile the project satisfactorily.
- 3. For the reasons given above and because this project in a general way will begin to become involved in the subjects of interrogation and some aspects of brain-washing, TES/CD has decided that it should be funded through project MALIFA rather than by less secure methods.

ISS/Chemical Division

Distribution:

(10 January 1956)